

REMARKS

By this Amendment, claims 1, 3 and 7-10 are amended without any intention of narrowing the scope of any of the claims. Claims 3 and 7 have been amended to correct typographical errors and to further recite the claimed invention. New claims 11-20 are added, each of which is dependent from claims 8 and 9 respectively and is patentable at least for its dependency from claims 8 and 9 respectively, and for its respective recited features. Claims 1-20 are pending. Reconsideration and allowance based on the following remarks are respectfully requested.

Claims 8 and 9 were objected to as the claims allegedly recite a structural limitation in a manner that makes the claim unclear. Applicant has amended claims 8 and 9 and believes the objections are now moot.

Claims 8-10 were rejected under 35 U.S.C. §101 because the claimed invention is allegedly directed to non-statutory subject matter. The rejection is respectfully traversed.

While Applicant expressly disagrees with the rejection, Applicant has amended claim 9 without any intention of narrowing the scope of any of the claims and believes the rejection of claim 9 is now moot.

With respect to claims 8 and 10, Applicant respectfully submits those claims fall within an enumerated statutory category of patentable subject matter. They are directed to a practical application and the final result achieved by the claimed invention is “useful, tangible and concrete.”

First, the Office Action states, without explanation, that the claims are directed to a “judicial exception” to statutory subject matter. By failing to identify the “judicial exception”, Applicant submits the rejection is improper since Applicant cannot make a proper response without knowing into which alleged “judicial exception” the claims are directed. Nevertheless, Applicant submits that neither of claims 8 or 10 are directed to a “law of nature”, a “natural phenomena” or an “abstract idea”. Claim 8 recites a device manufacturing method comprising, *inter alia*, providing a substrate that is at least partially covered by a layer of radiation-sensitive material, providing a beam of radiation using a radiation system, using a patterning device to endow the projection beam with a pattern in its cross-section and projecting the patterned beam of radiation onto a target portion of the layer of radiation-sensitive material. Claim 10 recites a method of calibrating an interferometer for measuring displacements of a moveable object in a lithographic projection apparatus. Applicant submits

that clearly neither of those claims recites a “law of nature”, a “natural phenomena” or an “abstract idea”, rather each claim recites a tangible and practical process – one recites a device manufacturing method and the other recites an interferometer calibration method.

Further, the Office Action states, with respect to claims 8 and 10, that “[m]erely determining displacements as a function of stage-rotation and stage position, and determining interferometer model parameters, including coefficients for terms dependent on a variable representing beamshear of a measurement beam, using a least square fit would not appear to be sufficient to constitute a tangible result, since the outcome of the determination step has not been used in a disclosed practical application nor made available in such a manner that its usefulness in a disclosed practical application can be realized.”

Respectfully however, this focus ignores the entirety of claims 8 and 10, such as portions of claims 8 and 10 which the above-referenced language (as currently amended) further defines. Specifically, for example, claim 8 recites the patentable method subject matter of providing a substrate that is at least partially covered by a layer of radiation-sensitive material, providing a beam of radiation using a radiation system, using a patterning device to endow the projection beam with a pattern in its cross-section, and projecting the patterned beam of radiation onto a target portion of the layer of radiation-sensitive material. Thus, the claim recites a patentable method that yields a “useful, tangible and concrete” result, such as a target portion of a layer of radiation-sensitive material of substrate exposed to a pattern. The language referred to above (as currently amended) merely further defines this patentable method and clearly cannot detract from its patentability as it only further defines how it is performed. Similarly, claim 10 recites the patentable method subject matter of calibrating an interferometer for measuring displacements of a moveable object in a lithographic projection apparatus. Again, the language referred to above (as currently amended) merely further defines this patentable method and clearly cannot detract from its patentability as it only further defines how it is performed.

Therefore, Applicant submits that the rejection under 35 U.S.C. §101 of claims 8-10 should be withdrawn.

Applicant has addressed all the objections and rejections and respectfully submits that the application is in condition for allowance. A notice to that effect is earnestly solicited. If any point remains in issue which the Examiner feels may be best resolved through a personal or telephone interview, please contact the undersigned at the telephone number listed below.

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Respectfully submitted,

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